

FOR IMMEDIATE RELEASE

March 9, 2005

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As prepared

Good afternoon Senator Ortiz and Joint Health Committee members. My name is Dr. Zach Hall, Interim President of the California Institute for Regenerative Medicine, a job that I have held for exactly one week. I want to thank you, Senator Ortiz, for the opportunity to appear at this special hearing on implementation of the California Institute for Regenerative Medicine. I would like to begin by briefly introducing myself. I am trained as a basic neuroscientist and spent most of my career as a faculty member and department chair at the University of California, San Francisco. In 1994, I had the unusual opportunity of going to the National Institutes of Health (NIH) as the Director of the National Institute of Neurological Disorders and Stroke (NINDS), the leading agency world-wide in funding research on the brain. As Director, I was responsible for a research program that awarded more than \$500 million a year in grants and contracts to investigators across the country. Since my time at NIH, I have been a research administrator, both at the University of California, San Francisco, where I was Executive Vice Chancellor, and at the University of Southern California, my most recent position.

As NINDS Director, I became acutely aware of the ravages of neurological diseases such as Alzheimer's disease, Parkinson's disease and multiple sclerosis, and of the large numbers of Americans who are afflicted by these disorders. Moreover, I faced every day the fact that for most neurological disorders we have no effective nor definitive treatments. The tragic dimensions of neurodegenerative disease and its burden for patients and families were brought home to me in a very personal way about ten years ago when my mother was diagnosed with Alzheimer's disease, a disease that slowly and painfully stole her memory, her reason and her ability to recognize loved ones until her death two years ago.

Like many Americans, I followed the ground-breaking recent research on stem cells with hope and excitement, and, like many Americans, I was dismayed by the Executive Order of August 9th, 2001, severely limiting the number of stem cell lines eligible for federal government funding. These restrictions were discouraging to many scientists and have significantly slowed the pace of stem cell research in this country. The appearance of Proposition 71 offers a bold alternative to revitalize the stalled Federal effort and put California in the scientific and economic vanguard, pioneering new science and medicine for the benefit of mankind. My personal involvement with the Initiative began about two months ago when I met with ICOC Chairman Bob Klein for the first time to hear about the exciting plans for the Institute. To participate in this new historic venture as Interim President is for me a personal and professional opportunity of the highest order.

As you know, the California Institute of Regenerative Medicine was established in 2004 with the passage of Proposition 71, the California Stem Cell Research and Cures Initiative. The statewide ballot measure, which provides \$3 billion in funding for stem cell research at California universities and research institutions, was approved by 59.1 percent of California voters. It called for the establishment of an entity, the California Institute for Regenerative Medicine, to make grants and provide loans for stem cell research, research facilities, and other vital research opportunities. More Californians voted on Proposition 71 than on any other ballot measure during the last election.

One reason for the success of Proposition 71 is the support it enjoyed from a broad coalition of patient advocacy groups, from the scientific community, including 35 Nobel Laureates and a “who’s who” of Californian scientific and research leaders, 30 medical groups from leaders in the faith community, business and labor and from community and advocacy groups. A copy of the organizations and individuals who endorsed Proposition 71 has been provided to you.

Following passage of the bill, an outstanding group of leaders in medicine, science, business, and disease advocacy was appointed to the 29 member Independent Citizens’ Oversight Committee (the “Board”) by the Governor, Lt Governor, Controller, Treasurer, President Pro Tem, and Speaker. I am proud to serve as Interim President under this distinguished Board. Its members include:

- Dr. David Baltimore, a Nobel Laureate and President of the California Institute of Technology;
- Dr. David Kessler, former Commissioner of the federal Food and Drug Administration and Dean of the School of Medicine at UCSF;
- Deans of the Schools of Medicine at UC San Diego, UCLA, UC Davis, Stanford and USC, and the Chancellor of UC Berkeley
- The presidents of the Salk Institute, the Burnham Institute, and the City of Hope
- Disease advocacy leaders like Sherry Lansing (Chairman of Paramount Pictures), Joan Samuelson (President of the Parkinson’s Action Network), and Jeff Sheehy (San Francisco’s “AIDS Czar”) and seven other leaders.
- Gayle Wilson, former first lady of California, and other representatives of the business community.

The charge of the Board is to create a new agency which will transform biomedical research. In the scant two and a half months of its existence, the Board has made excellent progress toward that goal.

Since January 1, the full Board has met three times (January, February, March) and has established five sub-committees which have, in aggregate, met seven times. Two of the committees, the Presidential Search Committee and the Site Committee, are responsible for recruiting a permanent president and for finding a permanent site for the Institute, respectively. The Presidential Search Committee has engaged a professional search firm (SpencerStuart) to identify and make a preliminary screen of outstanding candidates. The Site Committee has issued an RFP for site proposals, which are due on March 16th.

The three other sub-committees of the Board are responsible for setting up the three permanent Working Groups that will serve the Institute in its on-going work. These are:

1. The Scientific and Medical Research Funding Working Group (the “Grants” Working Group) which will be responsible for scientific evaluation of grant proposals to the Institute.
2. The Scientific and Medical Accountability Standards Working Group (the “Standards” Working Group) which will recommend scientific, medical and ethical standards for stem cell research and clinical trials and therapy delivery to patients.
3. The Scientific and Medical Facilities Working Group (the “Facilities” Working Group), which will make recommendations to the Board on grants and loans for facilities for stem cell research.

In its effort to recruit the best minds nationwide to the Working Groups, the subcommittees have met to determine search criteria, process and timelines. Over 500 potential candidates are currently being reviewed for membership on the Working Groups by committee members. We hope recommendations for membership of all of the subcommittees will be completed by the May

Board meeting. Please note that all of the Working Group subcommittees, as well as the Board, meet in public in strict accordance with the Bagley-Keene Open Meeting law. Moreover, the names and resumes of all prospective appointments to the Working Groups will be made public before their consideration by the Board to allow comment.

The job of President, as defined in the Initiative, is to hire the scientific and administrative staff of the Institute and to direct its day-to-day operations. I am pleased to report to you that interim headquarters for the Institute have been established in Emeryville and that 11 staff members have been hired. One of those is Walter Barnes (a 39-year veteran of state service who is on loan from the State Controller's Office to implement the financial systems of the Institute. We are just beginning, under my leadership, to hire scientific personnel. Just yesterday we posted a position for our first scientific staff member, the Director of Scientific and Review Programs, who will be hired through a competitive process.

Thus we have made a strong beginning, but we have a daunting task before us – to build a new Institute from the ground up. Nevertheless, we are confident that we will be able to begin our first grant-making activities in a few months.

Following this general introduction, I would like to address specific comments to the Agenda item of the Oversight Hearing. Let me say at the outset that the success of our venture will critically depend on the confidence of the people of California in our integrity and credibility. Decisions made by the Institute must be transparent and must be perceived to be fair and objective judgments based on scientific merit, free of bias and conflict of interest. To achieve this end, we welcome public comment and strongly desire to forge a positive working relationship with the California Legislature.

Open Meetings

The ICOC is deeply committed to the principles of transparency and public meetings in all cases other than those in which specific open meeting law exemptions apply. All Board meetings and all Board sub-committee meetings are held in strict accordance with the Bagley-Keene Open Meeting Act. Notification is given at least 10 days in advance of each meeting to all persons who have requested it, and agendas and other information are posted on the Institute website (www.cirm.ca.gov), including material not required by law. Public comment is welcomed at every Board meeting, and all meetings to date have benefited from robust citizen participation. The ICOC has taken the public's comments into account in all of its work, and many of the individuals you have as witnesses today have spoken repeatedly at Board and subcommittee meetings. It is important to understand that absolutely no grant award shall be made and no medical or ethical standards established outside the public Board meetings. All grant awards and adoption of all standards shall be considered, discussed and approved only in open ICOC meetings.

In contrast, deliberations of the advisory Working Groups will be held in private as required in the Initiative. These groups are not responsible for decisions, but for evaluations to be considered at open ICOC meetings. Confidentiality in the Working Group meetings is essential to obtain valid evaluations from peer reviewers. The concept of "peer review", which will be the primary method for evaluating grants, is widely recognized to be the best method of obtaining expert scientific opinion and is followed not only by the NIH but by virtually every disease advocacy organization that funds biomedical research. In each case, review is carried out under confidential conditions, which are necessary to obtain rigorous and candid scientific reviews of the merit of proposals, including candid evaluations of the scientific track record and capabilities of the scientists who will conduct the research. No scientist will offer frank reviews in an open meeting in which his or her remarks could be seen as public criticism of a colleague and peer.

A second reason for confidentiality is that researchers commonly include in their proposals significant detail about their planned research, such as detailed descriptions of novel ideas, and unpublished results. It is important that investigators be able to submit such information in a confidential environment, lest their ideas be at risk of being appropriated by others, and lest any propriety information they share be open to public disclosure.

The same principle applies for the Standards Working Group which will have the important job of making recommendations to the ICOC for development of policy on medical and ethical standards and then subsequently address compliance issues. Because sensitive subjects must be dealt with, including real-life examples that have presented problems, confidentiality is essential. Public discussion could have a negative impact on the practicing physicians and operating medical centers featured in a given example. Individuals' concerns about the potential repercussions of public scrutiny could have a chilling effect on honest discussion.

Dr. Bruce Alberts, President of the National Academies, has addressed some of these issues in a letter to the Chair of the ICOC. (A copy is provided to you.) James Wright, General Counsel of the National Academies may address these issues further in his remarks.

Conflict of interest

Conflict of interest is an extremely important issue for the Institute. We are committed to having strong standards for all of those associated with the work of the ICOC and the Institute. Conflict of interest issues arise at several levels: for Board members, for Institute staff, for Working Group members and for grantees. I will address each of these in turn.

1. Each of the Board members have filed individual Form 700 statements of economic interests consistent with state law and Fair Political Practices Commission regulations. In addition, please note that the Initiative states that Board members cannot vote on requests for grants from his or her institution. A more comprehensive Conflict of Interest policy has already been reviewed by the Board at its March meeting and, following outside comment from the National Academies, will be returned for further consideration in April.
2. The Board of the Institute has adopted strong disclosure requirements and conflict of interest policy for employees of the Institute. At its meeting last week the Board adopted an Incompatible Activities Statement for employees. This statement is modeled on the comparable statement for other State of California employees.
3. For the working groups, the ICOC is developing policies for members that will be based on the federal NIH guidelines on conflict of interest for review group members. Our goal is to bring these to the Board at the May meeting, at the time the Working Group members are scheduled to be selected. Additionally, to avoid conflict of interest, the Standards Search has recommended to the Board that all peer reviewers of the Grants Working Group – the scientists and physicians who judge the scientific merit of proposals -- be from out of state. Please note that this standard exceeds that of the NIH.
4. For grantees, we will develop conflict of interest guidelines that are based on those of the NIH. Recommendations for these guidelines will be made by the Standards Working Group once it is established, and then brought to the ICOC for final discussion and approval.

Patents and Intellectual Property

It is our hope that the discoveries funded by the Institute that are made in the laboratory will lead to effective treatments in the clinic. To bring effective treatments to market, partnership between academic and commercial researchers will be essential, and we will need to engage commercial

firms in our efforts. In anticipation of this partnership, Proposition 71 included four commercial life sciences seats on the ICOC.

Intellectual Property and patents are essential to the movement of discoveries from academia into the private sector. Proposition 71 requires that Intellectual Property agreements be included in every grant and loan award. These agreements will allow the State to share in the gains from any patents or other Intellectual Property developed with Initiative funding. Formulation of the principles that guide these agreements will be a major task for the Board. Because of the range of activities of the Institute, specific IP agreements will necessarily depend upon the type of grant, as well as the type of research funded. The overall policies, as well as each specific agreement, dealing with Intellectual Property rights arising from research funded by the Institute will be discussed and adopted in public ICOC meetings.

In formulating these policies, the Board will cooperate closely with the California Council on Science and Technology (CCST) to develop best practices for state-funded IP agreements. A CCST committee was created by Assembly Concurrent Resolution 252 sponsored by Assemblyman Gene Mullin with a charge of identifying best practices for Intellectual Property funded by the State. Two members of the Institute Board will serve on the committee, which is expected to meet shortly.

Medical and Ethical Standards for Research

The Institute is committed to creating comprehensive medical and ethical standards through a deliberative process that incorporates recommendations from many sources. No research grants will be funded until ethical and medical standards are in place.

Many of the medical standards, dealing with informed consent and scientific integrity, can be adopted from NIH standards. Others are specific to stem cell research. Many outstanding research institutions engaged in stem cell research, such as Harvard, University of Wisconsin, Stanford and the University of California San Francisco have formulated standards that we will consider in formulation of policy. In particular, we will look to the guidelines for stem cell research that are being developed by a blue-ribbon committee of the National Academy of Sciences and the Institute of Medicine. The publication of these guidelines is expected next month. This will be an important event as they will represent the first major consensus standards for stem cell research, promulgated by one of the nation's premier science advisory bodies. Proposition 71 itself deals with several of these issues. For example, the Initiative prohibits compensation to research donors or participants and permits only reimbursement of expenses. Surplus products of in vitro fertilization treatments may be donated only under appropriate informed consent procedures. Proposition 71 also reinforces existing California state law by prohibiting funding for reproductive cloning.

In addition to the specific standards mandated by Proposition 71, Institute-funded research will be subject to federal regulations for research involving human subjects for clinical trials. Institute-funded research is also subject to federal patient rights, safety and privacy protections.

In formulation of its policies, the Institute would like to cooperate with the Human Stem Cell Research Advisory Committee created under Senate Bill 322 by Senator Ortiz that is charged with developing medical and ethical guidelines for stem cell research funded in the state by private sources. The Institute looks forward to the convening of the SB 322 committee.

Disease Disparity and Diversity Issues

The California Institute for Regenerative Medicine is committed to a diverse workforce. To begin the operations of the Board and Institute we have used direct recruitments to hire 11 persons. These persons are involved in administrative work related to establishing the Board and Institute,

including providing support to the ICOC and the various subcommittees that have been appointed to develop recommendations for grant and loan standards and procedures for the ICOC to consider and adopt.

The first formal recruitment was my own, for which there were three finalists. We have now initiated a competitive search, as described above, for a Director of Science Programs and Review. Both in my work at NIH, and at UCSF and USC, I have always been personally committed to diversity in the work force, as a very positive value. It is our intent that all future hires will result from extensive recruitments designed to attract as diverse a group of candidates as possible. In the meantime, any new workload needs are being addressed by temporary loans through interagency agreements and by short term contracts. Once the recruitments are completed and final candidates selected, these interagency agreements and short term contracts will cease to exist.

We have been contacted by several organizations interested in helping us to achieve our goal of a diverse employee population. We will consult with them and welcome any further suggestions from the committee for others we might meet with.

Auditing and Public Accountability Issues

Financial accountability provisions are built into Proposition 71. Proposition 71 requires the Institute to undergo an annual independent financial audit of its activities and creates an unprecedented Citizens' Financial Accountability Oversight Committee, chaired by State Controller Steve Westly, with additional members appointed by the Treasurer, Speaker, Controller, President Pro Tem and the ICOC, which is expected to meet within the next 90 days. Once this committee has reached a decision on its financial program, the Institute would be pleased to report this information. This committee shall set guidelines for, review, and issue a public report on the annual audit.

The Initiative also states that general administrative costs of the Institute are limited to 3 percent of grant commitments, while less than an additional 3 percent is reserved for research administration costs.

To assure the highest standards of fiscal accountability, we are working closely with the State Controller's office to implement sound financial and accounting systems, and for the direction in setting up audit processes and reviews of those systems. This program will include test audits to validate and refine the system, after it is established.

A Finance Committee, chaired by State Treasurer Phil Angelides, which will also include the Director of Finance and representatives of the Controller and ICOC, will guide Institute financing decisions, determining whether or not it is necessary or desirable to issue bonds authorized pursuant to Proposition 71 and, if so, the amount of bonds to be issued and sold.

Summary

In summary, the Institute must work closely with the State Legislature and the executive branch of State government if it is to be successful and to achieve the high standards of integrity and excellence to which we aspire. We look forward to working further with you and your colleagues to explore important issues involved with implementation and operations of the Institute.

Most of all, we look forward to collaborating with you to advance stem cell research – together we can make medical history in California.